10/535134

## Rec'd PCT/PTO 17 MAY 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization

International Bureau

# (43) International Publication Date 3 June 2004 (03.06,2004)



## 1 1887 BANKEN IN BERKE KAN BENK BENK BENK BANK BANK BANK BARK BANK KEBAN BENK BENK BENKE BANKEN.

#### **PCT**

# (10) International Publication Number WO 2004/045774 A1

(51) International Patent Classification7: B04B 5/02, 15/02

(21) International Application Number:

PCT/SE2003/001781

(22) International Filing Date:

18 November 2003 (18.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0203413-0

19 November 2002 (19.11.2002) SI

(71) Applicant (for all designated States except US): ALPHA-HELIX AB [SE/SE]; Uppsala Science Park, S-751 83 Uppsala (SE).

(72) Inventors; and

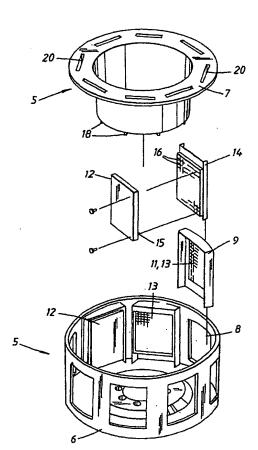
(75) Inventors/Applicants (for US only): ANDERSSON,

Leif [SE/SE]; Blåmesvägen 6, S-597 32 Atvidaberg (SE). MALMQVIST, Mats [SE/SE]; Hurtigs Gata 63, S-754 39 Uppsala (SE).

- (74) Agents: STRANDIN, Heléne et al.; Bergenstråhle & Lindvall AB, Box 17704, S-118 93 Stockholm (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,

[Continued on next page]

(54) Title: DEVICE AND ROTOR MEANS THEREFOR



(57) Abstract: The invention relates to rotor means (5) for centrifuging reaction vessels containing reaction mixtures in a device for asymmetric heating and cooling of reaction mixtures during centrifugation. The rotor means (5) comprise/-s at least one fan blade (18), which force ambient gas to pass the reaction mixtures. The invention also relates to a device for asymmetric heating and cooling of reaction mixtures during centrifugation comprising said rotor means (5).